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THE NEXT TWENTY YEARS--BACKGROUND NOTES FOR ADULT COUNSELING PLANNING.

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TO COUNSEL ADULTS WITHIN THE NEXT 20 YEARS, ADVANCED PLANNING AND ACTION BASED ON LONG-RANGE ASSESSMENTS MUST TAKE PLACE NOW. HIGHLY RATIONALIZED MANAGEMENT TECHNOLOGIES, CYBERNATION, SOCIAL ENGINEERING, AND BIOLOGICAL ENGINEERING CAN POTENTIALLY AFFECT THIS PLANNING. SOCIAL AND DEMOGRAPHIC CONDITIONS INTERACTING WITH THESE TECHNOLOGIES WILL INFLUENCE THE CHARACTERISTICS OF WORK, LEISURE, EDUCATION, VALUES, AND DECISION MAKING. VALUES AND BEHAVIOR THAT EMPHASIZE COMMITMENT TO TASK, FLEXIBILITY IN LEARNING, AND EFFECTIVE USE OF INCREASED LEISURE MUST BE LEARNED IN CHILDHOOD AND MODIFIED THROUGHOUT LIFE. DEALING WITH SOCIAL PROBLEMS AND UTILIZING THE OPPORTUNITIES WHICH TECHNOLOGIES AND SOCIAL GROWTH AFFORD WILL REQUIRE THAT PRIORITIES BE ASSIGNED, AND THAT MORE EFFECTIVE CRITERIA FOR CHOICE BE DEVELOPED. THE INCREASING OLDER POPULATION WILL EXERT POLITICAL PRESSURES TO PROTECT IT AGAINST MATERIAL, IDEOLOGICAL, AND EMOTIONAL DISPOSSESSION. BELIEF IN MAN AS BEING UNIQUE IN HIMSELF AND IN HIS RELATION TO THE REST OF THE UNIVERSE WILL BE INCREASINGLY CHALLENGED IN MANY OF THE INFLUENTIAL AND POLICY-PLANNING LEVELS OF SOCIETY. THE MOST IMPORTANT LESSON SOCIAL INSTITUTIONS WILL HAVE TO LEARN IS HOW TO CHANGE RAPIDLY AND FREQUENTLY. THIS ADDRESS WAS PRESENTED AT THE CONFERENCE ON THE TRAINING OF COUNSELORS OF ADULTS (CHATHAM, MAY 22-28, 1965). (RM)

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THE NEXT TWENTY YEARS: BACKGROUND NOTES FOR ADULT COUNSELING PLANNING

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In the next hour we will talk about what seems to be the general direction of the next twenty years in the United States. On the face of it, this is an outrageous exercise. If we had twenty years to discuss this subject we would still have only a slippery grip on it. Nevertheless, seriously speculating about this time period is an increasingly necessary task for those concerned with counseling and education. To counsel those new and older adults who will live in that world and to prepare those who will have the special role of guiding others will take all we can accomplish by way of advanced planning and action based on long-range assessments of that world. We have no rational choice but to try to imagine what the trends of the next two decades might be so that we can prepare tomorrow's adults to deal with them -- recognizing that while we cannot predict with certainty, we can anticipate that which we ought to be prepared to deal with just as we prepare our national defenses -- not for what will happen, but for a number of eventualities which might happen.

Twenty years is a more or less arbitrary figure. Speculation beyond that time period is fantasy and not very useful when the rate of change in all its aspects is so great. Indeed, even 20 years may be too long a time to speculate about reliably. So please understand that when I seem to be predicting or speaking with certainty about the future -- when I say something "will" happen -- it is only a stylistic shorthand for "It looks like a good bet that things may go this way."

Barring an occasional genius, the population that is going to influence the world over the next twenty years is alive today. So, to that extent we are familiar with the various value systems which will prevail, and this is very important to know something about. For values define what is right and wrong, what is worth aspiring to and preserving. Beyond this period, it may well be that the accumulated consequences of various technological and social trends will result in such different values that it becomes virtually impossible to anticipate what that world will be like. Most important, most, if not all, of what we will talk about is already under way, either in practice or inherent in laboratory models or legislative plans.

Obviously, in such a brief time there is no way to cover meaningfully all the likely significant trends these twenty years may encompass. Instead,

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I'll try to convey to you something of a general feel for this period, as it seems to me to be evolving, by taking my lead from our chief mode of both economic growth and creative expression; technological innovation and elaboration. I'll use some major technological developments to sketch the major outlines of the next two decades. By beginning in this way, I will be able to call your attention to technological trends which will have profound implications and impact for our society, and I will be able to draw in other social, demographic, and value trends which, in conjunction with these technological trends, further characterize the picture of the future I want to share with you today.

The first technology I want to draw your attention to is that invented by management specifically in order to conduct mammoth research and development programs. This technology is especially dependent on systems planning, operations research, and other sophisticated methods for attaining efficiency. It integrates thinking, laboratory and industrial operations, and organization, so that the pace and application of intellectual activity are regulated in much the same way as assembly lines regulate human physical activity. This set of highly rationalized techniques harnesses human and material resources on such an immense scale as to influence the very educational, economic, and political balance of major sectors of the nation. This technology was applied first to the development of strategic weapons, then to space exploration; it may next be used to underseas exploration. And it could as well be applied to reorganizing our transportation systems or to "developing" an underdeveloped nation, to city rebuilding and new city building. Indeed, I suspect that this last may well be where the aerospace industry will look for new areas to enter in order to put to new uses its facility with this large management technology.

The second technology I want to mention is cybernation -- that is, the use of automation and computers. These cybernetic devices have been steadily displacing the unskilled; they are now beginning to displace even the engineer, the white-collar worker, the auditor, the machinist, and the middle-level manager. As Dr. Börje Langfors, a Swedish expert in this area, wrote in the February 1964 issue of INTERNATIONAL SCIENCE AND TECHNOLOGY:

> Computers have developed designs that range from airplanes to architecture, from electrical circuits to clothing, from ships' hulls to highways. The results have exhibited the constraints of an experienced human designer's feel for form and esthetics and his canny knowledge of the possibilities and limitations of the production facilities.

And he goes on to say that in the future, "the designers will design the designing system which designs the actual object."

To me, this quotation presages much more about the future than simply the reduced economic value of the ordinary "brain-user." All those

whose work is not fundamentally creative, then, are the potential victims of cybernation. So compelling are the competitive and operational reasons for its use that only a major social disaster will slow the implacable usurpation of the routine economic activities which most people equate with self-respect and livelihood. Cybernation means an end to full employment, recent articles representing special interests notwithstanding. It means the end of work as a focus of life for growing numbers of people. As Bernard Muller-Thyme, Professor of Industrial Management at MIT, has said:

> It is silly, it is futile to talk of our ever being able to relieve what in America now is called "chronic unemployment." ... There is no amount of retraining of the work force, of the working population, ... which is going to replace that which has been destroyed by automation.

A direct product of the computer becomes the third technology which confronts us: social engineering. Without the enormous abilities of the computer there would probably be only modest improvements over the next couple of decades in the ability of the behavioral sciences to predict and control behavior, but I believe the computer will change this. On the one hand, the computer provides the behavioral scientist with the means for combining in complex models as many variables as he wants in order to simulate the behavior of men and institutions. In the past, the behavioral scientist simply could not deal with as many variables as were important in understanding and predicting human behavior. Now he can, using the immense capacities of the computer. And then he can test these models against conditions representing "real life." For, on the other hand, the computer provides a unique capacity for collecting and processing enormous amounts of data about the state of individuals and society <u>today</u> -- not ten years ago, or five years ago, but today. Thus, the behavioral scientist not only can know the state of society <u>now</u> as represented by these data, but he can use them to test and refine his theoretical models.

Already the computer, used in these ways, has impressively improved our ability to describe the way men think through and solve certain types of problems. It has substantially increased our ability to predict how various populations with specific background characteristics will deal with conflicting information on political issues. It also provides the technology for teaching four- and five-year-olds to read. (Note, however, it does not provide parents with the moral and ethical integrity to interpret to these youngsters the significance of what they read, say, on the front page of the newspaper.) This powerful technology for predicting and influencing behavior may come just in time to rejuvenate the democratic processes -- or, irresponsibly applied, it may totally destroy them.

The fourth technology is biological engineering. By this I mean the sophisticated manipulation of organisms, either directly or by modifying the organism's biological environment. This technology is and will continue to

be used to produce bacterial, viral, and chemical agents for special forms of warfare, both to kill and to pacify. In future years we will see biological engineering begin to be used to alter the genetic code which transfers to the next generation the directions for its nature and form. There will also be an increasing capacity to manipulate the organism once it is born, to increase the size of the brain or the heart or other organs by the selective use of chemicals after birth, and to transplant organs from human to human. And we shall also see biological engineering used to modify emotional states and mental abilities. Telemetering and computer techniques already in use for monitoring, diagnosing. and treating biological malfunctions will be greatly refined and extended. Increased understanding of biological growth and organization will produce important improvements in the prevention and control of disease. The resulting increase in the numbers of healthier elderly people will expand the group for whom leisure will have to take on a new role if life is to be meaningful.

Lynton Caldwell, writing in the October 1964 YALE REVIEW, poses the challenge of biological engineering this way:

> The coincident and related explosions of human population and of biological knowledge may conceivably represent the most critical stage in human evolution since the last great ice age. The ability and necessity to control the numbers and hence (in some respects) the genetic characteristics of future populations could create a situation without precedent in human existence. And, in addition, the availability and refinement of chemopsychiatric drugs suggests both hoped-for and frightening possibilities for the manipulation and control of human behavior. Never before have the necessity and the possibility of control over man occurred at so decisive a conjunction.

Thus, each of these four technologies has unprecedented power for enlarging and for inhibiting the potential of the individual and of society. Unprecedented because never before has it been possible or necessary to apply them on the large scale which is now feasible. And never before have the means for affecting society on such a scale been so potent -- so likely to result in significant changes -- whether or not they turn out to be those intended. Whether these technologies will enlarge or inhibit the potentials of the individual and society will depend on more than the technology itself. It will also depend on the social context in which it operates and on the decisions and policies developed to relate the technology and the social context.

Certain developing demographic characteristics in this country will be overriding in defining that social context over the next two decades. I am sure you are familiar with these figures, but some are worth re-emphasizing. We expect around 230 million people in the United States by 1975; about 250 million by 1980 -- not to mention the world population of 4 billion by 1977. By 1970 the proportion of young people will be about half of our population.

Among other figures, the number of women age 20-29 will rise in the next decade from 12 million to 18 million. During the same period, the population over age 65 will increase by at least 50% -- unless the toll from smoking and DDT is unexpectedly high. Around 1980, approximately 80% of those in the U. S. will be living in urban areas, and cities now separate will be merging into megalopoli stretching from Norfolk to Bangor, from Minneapolis to St. Louis, from Seattle to San Diego. Thus, during this period the very idea of the city will alter significantly as physical mobility becomes ever greater, communications ever more accessible, and as the old cores of some central cities rot while those activities which gave them life move outward as their poor and dispossessed concentrate inward.

These social and demographic conditions, interacting with the technologies we have reviewed, will strongly influence a number of significant social trends. In particular, many of the problems and opportunities we will face during this period will derive from substantial differences in perspectives and life styles as between the new and large group of adults phasing into power in the society and those older adults phasing out of power. Let us consider some plausible characteristics of work, leisure, education, values and viewpoints, and decision-making in a democracy.

While first-rate professionals, including managers, will be in short supply in the years ahead, great numbers of the unskilled, and many blue-collar workers and middle-level engineers, will find their jobs usurped by technological change. As for middle management, the relative number of career opportunities will decrease, especially in large organizations and in government. The routine decision-making and information-organizing activities which now occupy much middle management will be -- already are being -- taken over by computers, and personnel supervisory tasks will decrease as cybernation reduces the number of personnel to be supervised. There is already a growing awareness that, except among some professionals, one may have to change his type of job two or three times in a working career. Traditional expectations about settling down to a lifetime job, or at least doing the same thing all of one's working life, will give way more and more to expectations that what one does, and when one will need to learn another job, will depend on a rapidly changing technology over which the individual has little or no control.

One happy consequence of social complexity and overloaded professionals will be the efflorescence of "sub-professionals," aides to doctors, clergymen, lawyers, social workers, teachers, and so on. Gradually we will learn to give status to these tasks and professionals will learn to delegate the less demanding parts of their work. But only gradually.

By the 1970's, it is plausible that the combined effects of economic need to share jobs, the number of people at all levels being re-educated or updated; and the growing tendency toward the more efficient round-the-clock operation of cybernated systems, may well have led to a general trend of

longer vacations or sabbaticals with little diminution in the actual number of hours worked per week. Thereby, there will be ever greater numbers of people with large chunks of free time, brought about by either unemployment or changes in the work schedule.

Leisure -- a way of life for which no historic experience seems adequate for guiding our 200 million-people-plus society -- will ever more be the lot of the mediocre, the partially trained, the partially educated. The very highly educated, the highly skilled, because they will be in short supply and the demand for them will be ever greater, may well have even less free time than they do now. The anomaly of this situation is that, for the vast most part, leisure will fall to those who are least prepared to take advantage of it. As of now we simply have no really good ideas for transforming our free time into an occasion for social and personal growth for such a large number of people. What's more, the ideas we do have for leisure use seem to emphasize volunteer or do-it-yourself activities -- sort of a perverse protestant ethic. And these types of activities would increase the amount of enforced leisure, e.g., unemployment, for those who otherwise would supply such services for a fee.

Thus, it seems that both the new technologists who will be increasingly influential and in demand, and those whose work time is shortened will require educations which differ greatly from those which they are now receiving. But only gradually, and chiefly at the occupationally elite level of society, will it become evident that the educational requirements for productive and meaningful lives will require profound changes in the procedures, substance, and spirit of the educative processes, beginning at least as early as the primary grades and continuing throughout life. Values and behavior that emphasize and comfortably mesh commitment to task; flexibility in learning, unlearning, and re-learning; constructive attitudes toward and effective use of more hours of leisure, and so on, cannot be taught just at the college level, or probably even as late as high school; and they cannot be taught by teachers or under administrators who do not share these values. They probably must be learned in childhood and then modified throughout life as an active learning experience.

On a national scale this deep change in the philosophy and content of education will only come gradually as appropriate influential institutions develop sufficient sense of where they should go and what needs to be done to get there. More research will be necessary to determine what needs to be done and which of the many ways explored are the most effective and economical. These studies will be evaluated and re-evaluated, if only because there will be partisan argument about their meanings. Then the results, good, bad, and indifferent, will have to be understood and accepted by those who must act on them to alter the complex institutions of teaching. This will require changes in the viewpoints of Congress, state legislatures, teachers' colleges, public school systems, PTA's, taxpayers, and, not least, the teacher. After this the changes will have to be applied. Still later, the products will begin to move into the adult world.

Planning educations for specific occupations will be more difficult because of the lack of sufficient foreknowledge about specific occupational needs as they are altered by rapid technological change. It has been estimated that even today half the employed are in jobs which did not exist when they were in school. The pace will quicken.

And educating for leisure will be no small problem either. Not only do most of our teachers, school administrators, and parents suffer from a trained incapacity in the fine art of self-fulfillment, but right now we are in the ironic position of emphasizing education for work and of eliminating the "frills in education." This, just when probably a larger portion of the people who are being educated for routine skill jobs in a conventionally work-oriented society should be concentrating on learning "frills" with which to give more meaning to their more leisure-oriented lives.

Now let us turn our attention to some implications of these technological and demographic changes for our political processes and its forms of decision making and policy planning. I believe they will make it much more difficult for the planner, the decision maker, and the educated citizen (I will not even talk about the so-called man on the street) to act in their joint and individual ways to advance the ideals of democracy through our customary means. Let me point out some of the reasons why.

Institutions will get larger and more centralized. Computers are already revising and reversing the previous industrial trend of decentralization of command and control. Data which once had to be manipulated and acted on by many minor power centers can now be processed and focused more rapidly and analyzed, displayed, and interpreted much more flexibly and usefully for and by top management. This centralization of analysis and action is facilitated by the increasingly interlocking and overlapping character of all major social problems: highways, pollution, medical care, poverty, air traffic control, education, work, water conservation -- you name it. Effective treatment of each of these issues requires attention to several major social and technological factors at the same time.

Now, dealing with the increasing complexity of social problems will demand increasingly esoteric and detailed data, techniques, and concepts. I refer to mathematical methods of operations research and systems analysis as well as to the data and theories of sophisticated behavioral science and economics. Here I include, too, the use of computers to manipulate the data in terms of these theories and then to use the results to manipulate other data through several stages of further elaborate conceptualization. All of these "inputs" to decision making will often be well beyond the knowledge and experience of most educated citizens, whether the issue be nuclear strategy or the nature of the risks involved in using a new drug. For, while the computer is already a powerful facilitator of highly creative thinking, it does, by that very ability, produce a kind and level of thought unrelated to that used by most people in their everyday lives.

The demand will increase for people in government and advising it who can deal with complex issues scientifically and technologically. As a society, it is our deep faith that science can find the answer, can make things right. Thus, we can expect an increasing portion of people who influence the direction and style of decisions and policies in government, federal and local (whatever "local" comes to mean), to be professionals, technicians. And given the nature of their education, most of them will have had at best little more than ritual exposure to those recorded experiences of mankind and to their interpreters which help to make men wise, humble, and sensitive. There will be little time for such exposure. The time consumed in attaining professional prerequisites for being a good technician will increase, whether one is a computer expert, a social psychologist, and economist, or a specialist in what-have-you.

In this atmosphere, increasingly, the attempted solutions to social problems will be statistical solutions, partly because the aggregate needs of such large numbers of people lend themselves to socially good statistical solutions, and partly because the techniques for defining as well as solving those problems depend so much on the statistical methods and "world views" of the social technicians and their computers. This is very important -- more of the people who will be turned to for advice in defining what the problem is, as well as how it can be solved, will be those who will define the problem (because of their techniques) as a statistical problem. Already some planners are tending to place undue emphasis on those aspects of reality which the computer can deal with just because the computer can do so. The individual -- the point off the curve -- becomes an annoyance. Consider, as examples, the ubiquitous preoccupation of the universities with cost per student credit hour or the dominant role of the college entrance score in selecting the candidates most likely -- note that statistical term -- to get through.

Dealing with the societal problems we face, and exploiting the competing opportunities which technologies and social growth afford, will require that priorities be assigned.

Compared to the potential demands, our skilled resources are very limited: we can't take on everything at once. For example, even now some of our most important national programs suffer from inadequate management skills. Another example: we not only have an over-all teacher shortage; we have an absolute famine of really first-rate teachers, however one assesses teaching quality. At the same time that we assign priorities to deal with society's problems and opportunities, more and more long-range planning will be required. And more highly organized action programs extending over many years will be needed to complement the plans. We recognize that we can't get to the moon by 1970 by ad-libbing the space program from day to day. We won't solve our growing air pollution problem or educate for a cybernated world or eliminate poverty or build a sane urban environment by ad-libbing these programs either. Indeed, some of the formidable problems we face today have developed because we did not begin to plan ahead ten years ago.

Whatever the nature of long-range programs, once program priorities are assigned and the physical, manpower, and psychological resources of the nation are committed, the success or failure of the program may take years to determine. It is not now clear through what political format this capability to carry out long-range programs will be implemented. Given the complexity of the issues and the long time spans involved, it would seen to require, as Sir Geoffrey Vickers points out, "either an immensely trustful or immensely knowledgeable electorate" -- neither of which we now possess. What's more, as institutions become larger and their problems and programs more complex, the public relations shield behind which they work will become broader and stronger.

Let me say a bit more about the matter of public relations -- or, if you prefer, public information -- for it, too, takes on new significance in this world we are speaking of. Partly because of the vested interests dispensing the information; partly because the technical knowledge possessed by any citizen is miniscule on most matters; and partly because of the ethical and technical complexity of most major issues, what will be communicated to citizens, ostensibly so they can judge their self-interest, will be less and less a representation of all the factors which ought to go into their assessment. Again, I am not speaking about the man on the street, who never did understand and who usually does not care about understanding -- I mean you and me.

This inadequate access to reality is clearly the case already with defense policy, space policy, and economic policy, for even the most intelligent and conscientious citizen simply does not have or cannot decipher the esoteric information needed to make informed judgments, for example, on the current controversies about the development of new weapons, manned or non-manned space programs, or the real impact of automation. It will increasingly be so with other policies. In part, the information we need just won't be provided. In part, there will be no way to judge the validity and sufficiency of the information which is available. More often than in the past we will not know what we should be looking for. Whatever the situation "inside," it will always be possible to obscure it "outside" with a public information program masquerading as unimpeachable information, or a program which claims that there is more to the situation than is understood or can be revealed. This latter claim may, in fact, be true. The problem is that it will be more difficult to find out if it is true, and if it is true, what it means in the light of possibly other unknown or unadmitted information. As Hans Morgenthau recently put it:

> Scientific arguments have become indispensable weapons in the struggle for power within the executive branch, and the scientific elites have become the providers of these weapons. Starting out as the disinterested purveyors of esoteric knowledge, the scientific elites end up by rationalizing and justifying the political interests by dint of their possession of esoteric knowledge.

These rapid and widespread changes Americans will participate in over the next two decades will inevitably have their reflections in the values and viewpoints by which the individual makes sense of himself and the world.

The modes of expressing values will not be totally new, but the pattern and type of expression probably will often be significantly different from today. More people will be sensitive to issues and circumstances as a result of better education and because, even with no changes in percentages, absolute numbers will be larger. More people will be personally involved in the outcome of policy decisions because more issues and circumstances will involve social welfare. Equally important, there will probably be more people for whom these issues and circumstances will have little significance, being too complex or too removed from personal preoccupations. And many of those who do concern themselves with public issues will feel less and less competent to understand or to influence national and international problems. In part, this will be due to a heightened awareness of the overwhelming range of events and issues as defined by an expanded mass media; in part to rapid social and technological changes which will in fact complicate conditions; and in part to a growing sense of being locked into a system so complex and so large that the individual cannot comprehend it, let alone affect its operation.

For some, dilemmas will deepen between individual responsibility to conscience and social responsibility to national purpose or to organizational loyalty; these will often be in conflict. For example, international questions involving consequences critical for the continuation of peace or the conduct or war -- especially local wars -- will become more amorphous, and the chances will likely diminish for discovering firm moral positions regarding a given military or political event. What is morally and ethically right and what is wrong will be perceived differently as the political and social context in which the judgment is made is narrowed or expanded through the information and event-defining sources -- the public information sources -- available to the concerned individual. Viet Nam is a prototype of things to come.

The sheer growth in numbers of people -- and hence in numbers of events and their consequences -- will mean a steadily increasing opportunity to sense the world as full of disaster, crises, violence, and danger. By the same token, attractive and felicitous events will be more numerous. But even as now it will be the former which will tend to dominate the headlines. Putting such events in perspective will mean treating them as percentages, which will bring its own value dilemma. Even now we wonder whether to evaluate bomb-testing fallout in terms of the tiny percentage increase in tragedies or in terms of the large increase in absolute numbers of tragedies.

The means people use to cope with the big world will vary, even as they do now, but there are two which will be increasingly in evidence. On the one hand, more people more frequently than at the present will find meaning in public protest actions aimed at the big system. The Berkeley demonstrations, sit-ins, and a few outspoken observations by the clergy are precur-

sors of much more of the same. Some of it will be, in Arthur Waskow's term, "creative disorganization" serving to stimulate much needed institutional change. Some of it will be counter-productive, encouraging rigidity and reaction.

On the other hand, more people will find meaning in withdrawal from the system, turning to those opportunities in public and private life which emphasize intense person-to-person involvements or individualized self-seeking, such as direct social aide roles in the poverty program, or service in the Peace Corps. Among more privileged youth, at least one trend will be much more evident: more of them -- though still only a relatively small proportion -- will opt out of the big society. They, particularly, will seek those jobs where relations with their fellow man will free them from the alienation of big bureaucracies and commercialism. Other youth will search for identity and meaning through intense exploration of religion, sex, art, love, and all those very intimate relations with another person, thing, or idea which, intensively pursued, can insulate one from the big world.

As now, some, especially among those who rise to power, will obsessively pursue the same techniques which we like to think have produced our successes: the calculated manipulation of environment and man by the exploitation of technology and organization. And there will be increasing numbers of scientists and engineers in this group. Of course, there will continue to be large portions of the population who have neither the motives nor the imagination to want to change the course of their civilization.

As the next two decades proceed, a larger proportion of adults, especially older ones, will find themselves dispossessed one way or another of lifelong jobs, or of long-held views and ideas, or of a sense of being in reasonably close touch with what is happening to man and his world. More, but by no means all, of the younger generation than in the past will, to a somewhat greater extent, expect dispossession in one form or another, but older adults will not adjust so easily. For them anxiety, depression, annoyance, and hostility, arising from feelings of incompetence or as a reaction against being pulled out of deep ruts, will accompany forced changes in jobs or living patterns.

This sense of dispossession will be especially frustrating because it will be exceedingly difficult to come to grips with its sources by conventional political methods. The scientists, technicians, and rationalizers will be deep in the interstices of the bureaucracies of government and industry, their products and programs based on esoteric equations and computer programs, and on the subtle jargons of the natural and behavioral sciences.

Many who will be sensitive to the pace and complexity of events but who need the emotional security of a rigid framework of values for coping with them will likely commit themselves to extremist groups. Especially among older adults, stability will probably be sought by supporting conservative or reactionary philosophies.

We can certainly expect the growing older population group to exert political pressures intended to protect it against material, ideological, and emotional dispossession. The growing size and more aggressive political activities of this older group could confront the nation with a serious and deep-seated priority conflict as between them and the needs and values of the increasing numbers of youth. For at the same time, much of the well-educated younger generation and the more versatile and well-trained middle generation professional group will probably be happy about or, at worst, indifferent to the high rate of social change.

Although the general level of factual education will improve, it will improve, I think, relatively more for those from the better and wealthier schools; for many years there will continue to be adolescents and young adults who receive little or inadequate education. After all, we have much to learn and to commit ourselves to before really good education keyed to the needs of the poor is a reality. This under-educated group will increasingly develop its own values and beliefs, justifying withdrawal from -- or violence toward -- the rest of society. Thereby, unorganized crime will continue to flourish, and probably increase. Without enormous, carefully planned efforts, it will become steadily more difficult to convince these youths that it is in their interest, and within their reach to share the values of a society which has so grievously deprived them.

The family environment will provide no more adequate guidance and understanding for youth tomorrow than it does today. In many cases, it will provide even less. Many of the younger generation, notably those among the poor who are beneficiaries of the new education program, will learn about and take part in a wider and more complicated world than their parents can or care to deal with -- with good and bad consequences not unlike those which characterized the world of second generation Americans. In all strata, many parents, preoccupied with their own frustrations, insecurities, and anxious consuming, will lack the empathy or interest to follow those of their offspring. Parents who go back to school may have a better basis for rapport with their young, sharing similar exposures to knowledge and ideas in that environment.

The increasing complexity of society's demands; the chronic shortage of topflight skills to meet these demands, combined with a deeper understanding of the behavior of men as individuals and in groups; the stress on science and logic, and the powerful tools for social analysis these will provide, will all intensify emphasis on the systematic organization of an enlarging range of activities through the application of the methods of science and engineering. As I mentioned earlier, these rationalization methods will be used to organize men, work methods, and administration, as well as to set priorities and goals -- sometimes wisely, sometimes foolishly.

In response to the complexity and scale of social welfare demands, the inexorable expansion of the federal government as the dominant device for social control will be the major factor. New relations between big government

and big business will further blur the distinction of the two -- and further increase the opportunities for rationalizing social welfare programs. But rationalization will not easily or completely destroy traditional political approaches, especially in Congress. Indeed, it may well be that a major task of the highly rationalized planning and policy levels of government agencies will be to invent the means for enlarging and sustaining inefficiency at some levels of society, in order to keep people busy!

For many, however, there will be attractions in the rationalized life of this society, especially as the individual's opinion of his competence to deal with the world decreases while specialized training increases his sense of competence to deal effectively with his own task within a highly organized framework.

Thus, if we avoid the kind of state which seeks to detect and inhibit individual deviations from accepted standards of purpose or of efficiency, we can expect the persistence of substantial "chaos" in the midst of order. The very fact that society will be so large and complex also means that it will be able to tolerate groups living at radically different paces and styles (as they do today in large and cosmopolitan cities), as long as they show no deliberate intent or potential power to alter significantly the direction of prevailing social goals. There are sure to be many small and scattered community experiments, devoted to seeking self-satisfying and private experience, where the emphasis will be on simple living, or religion, or voluptuousness or whatever else whimsy, contrast, or serious protest invent as means for counterpointing or opting out of the rationalized big society.

During the period we are talking about, belief in man as unique in himself and in his relation to the rest of the universe will be increasingly challenged in many of the influential and policy-planning levels of society. While religious and humanistic institutions will assert the ineffableness of man, other powerful interests and institutions will act as if -- and in so acting will come to believe -- that man is susceptible to the same techniques of manipulation as other elements in the social and physical systems. More subtly influencing attitudes about the value and purpose of the individual life will be the increasing burden of humanely coping with the economically unproductive and the under-endowed in our society -- not to mention the many other problems that sheer human numbers will generate at home and abroad.

In keeping with the general industrialized world view which sees merit in cooperative action and its facilitation through large institutions, and partly in response to increasingly minority status vis-a-vis other religions, the drawing together of the major Christian churches will continue slowly: what the impact on daily life may be will depend on dogmas and directives as yet unformulated. But church-going is not more likely than at present to produce a country more morally or ethically united. It will provide a sense of emotional support, a deity to depend on, but it is doubtful that it will inspire in most of its followers a dedication to seeking and expressing God. However,

every indication is that for some clergy and laymen the changes and challenges we have reviewed will provide a deepening struggle and a deepening opportunity to find an intense relating of themselves to their God. With increasing exposure to non-Western religions will come further challenges and opportunities for spiritual growth.

This brings us to the end of our survey of the general direction of the next couple of decades. Even though it has been all too brief, I hope it has at least supplemented your speculations on what the future is likely to hold as far as the interplay between the new technologies and social behavior.

The picture I have outlined in these few minutes is certainly neither tidy nor wholly pleasant. On the bright side are improvements in living standards and education in the United States, as well as fuller lives for many of its citizens. On the other hand, overtones of Orwell and Huxley do lurk behind many of the signposts, though our society seems too big, too full of contrary trends and unanticipated consequences for anything so monolithic as 1984 to be very likely. My particular vision may be all wrong, but the chances are that it is right at least in a number of important aspects -- aspects which are critically significant from the standpoint of the challenge they present for your interests and activities. Whether or not the details are correct, to me the moral is clear: there will be no opportunity for any of us concerned with man's full growth to rest on our laurels. The inexorable pressures to innovate fundamentally and wisely in the substance and methods of guiding, teaching, and counseling, and in those of administration, will be enormous and unending -- and we will be desperately short of wise men to implement these fundamental changes. Indeed, the most important lesson pivotal institutions will have to learn is how to change rapidly and frequently. This will be exceedingly difficult to do, but the degree to which the challenge is met will determine the extent to which, twenty years from now, we have a society that gives meaning to the individual.

DISCUSSION I

Dr. Donald N. Michael and Participants

Siegle:

I had a feeling that you made a very important statement but I didn't quite understand it. I have a feeling that much that we think about the computerized society will hinge on this concept; that is, the way the computer thinks and the way that we as human beings think; that is if we are concerned with the kinds of things that a computer can understand and do.

Michael:

There is a precise analogy to this which may make it clearer. In the time of Newtonian physics an educated person could cope perfectly well with physics, because the experiences that made up the everyday life of an educated person were similar to the kinds of experiences that were expressed in Newtonian physics. It was possible then to understand the formal expressions about that experience -- bouncing billiard balls, and actions and reactions, and so forth. Now in contemporary physics there is no parallel with everyday experience. Quantum mechanics, what's called strange particles, the behaviors of subatomic particles or of cosmological processes are not part of the experience that most people organize their world out of. It takes an intensive education from childhood on really, to make it a way of seeing the world, that is, as one can experience it. Now a lot of the gap between everyday experience and the formal properties of contemporary physics are the product of a rapport between the physicist and his machinery, his accelerators, his radio telescopes, his spectrometers, and so on. That is, what a man thinks when he visualizes, what he conceptualizes about his world as a contemporary physicist, is an expression, in part, of the hardware he uses, and it isn't idle to say that man's senses are extended by his telescope, etc. They are, and to the extent his senses have been extended his way of thinking has changed as well. Now I am suggesting here, and I think there are evidences, and these are shared by people who have worked in these areas, that something similar happens when you begin to use a computer as part of your thinking environment. (I am talking about the computer used, not to run cards through and add up figures and take standard deviations, but as a device for simulating reality, inventing realities and trying them out...playing with alternate world expressions, the expressions of the world that you couldn't play with if you didn't have the computer to use). When you come to that point you are establishing a new rapport between man and machine, and a new level of conceptualization as a result of this. Now when I say "playing with computers" I really mean this. Some of you may know that in the Boston area, at MIT, there is a system called "MAC" - Multiple Access Computer - from which about 40 scientists, running from behavioral to physical, have their own inputs to the master computer. Some of these inputs are in their own homes so that in the middle of the night they can wake up with an idea, punch it into the computer, play it back to see if it was

good, or play their thoughts through and decide whether or not to revise them. And this is just a way of organizing experience and building abstraction on top of abstraction of the sort that the computer allows you to do. Not that it is doing the thinking differently for you, but it is allowing you to do different things with your thinking. But this results in an abstraction about reality -- a variety of abstractions about reality, whether they have to do with human behavior, physical behavior, economic behavior or biological behavior - which didn't exist before. Today the physicist has abstractions about reality which didn't exist before the linear accelerator and the cloud-chamber or what have you. Similarly, this kind or level of understanding, whether it is of human behavior or physical behavior, is one that, to the extent that it derives from rapport with the machine, (an extension of the brain in the machine...not a different kind of thinking, but an ability to facilitate the thinking of the highly creative human being) leads to a different kind of human world. Does that make it clearer?

Siegle:

Well, yes. That use of the word "level" apparently was a clue there. In other words, I can dare to think about things today which involve a greater complexity because I have this computer here. This frees me for something else, to go beyond the point where I ever did before. Yes, that makes sense to me.

Woditsch:

The machine can increase man's versatility.

Michael:

Yes.

Siegle:

This is a positive statement, Don. This is not a "crying havoc" statement at all. Actually this is not a qualitative thing. It's levels. It is really more quantitative. I will be able to get more thinking done.

Woditsch:

The scientists have had to develop numerous new languages to describe this rapport. We need people to be quite concerned about communicating the significance of the new languages, if we are not really to end up with the C. P. Snow kind of thing.

Michael:

What is your impression of the extent to which this is succeeding - this translation?

Woditsch:

My impression is that it is not succeeding very well. There are indications that it takes an extraordinarily perceptive and mature mind to do this effectively, and that we just don't have enough of these kinds of minds alerted to the problem yet to undertake the task.

Wientege:

Peter, I want to raise a question: that of the growth of the human mind versus the growth of the computer. Sometimes we think that the computer is something vastly complicated and vastly different from what we can comprehend, and that the human mind is something more limited. Yet I have checked computers and found errors of a logical nature, not mechanical. On this basis I was thinking "Don't sell the human mind short." It is a fabulous mechanism.

Siegle:

I didn't feel that the issue was that you are selling the human mind short. It was this rather quantitative level of speed of reaction, of being able to store a lot and --

Wientege:

All right! But who tells it what to store?

There is also one other ingredient to think about. As a grandfather with 6 or 8 grandchildren -- I think that this world is an interesting place to live in. And if you feel that it is a bad place, you are really letting down the human race. This is a counselor's view, of course.

Participant:

I am addressing myself to the subject of the computer. The brain can do this same complex thing that the computer can do. It is a matter of time.

Senders:

Suppose we said the computer can do the jobs that are defined for it, and that in fact, the definition of a job is something that makes it computerizable. This still leaves a lot of questions, but once a job has been defined, then the computer may be able to do it far better than the man can do it. But until the man can define it, it is not proper meat for the computer.

I would like to raise, however, the question that I thought King Wientege was going to raise. He said that he was going to talk about the growth of the human mind versus the growth of the computer. He didn't. He talked about

the human mind versus the computer. But what about the growth of the human mind versus the growth of the computer? One of the things that we have been taking as an established factor is the level of human intelligence, and, in fact, whether or not human intelligence is increasing is something that we don't know the answer to. Is an IQ of 100 in 1965 the same "level of intelligence," if indeed there is such a thing, as an IQ of 100 in 1945?

(Group discussion incomprehensible) but eventually leading to measurement of intelligence of the disadvantaged.

Participant:

But the point is this -- this clinical psychologist said to me: "The tests that I use can not adequately measure the skills, abilities, etc. of groups of disadvantaged people." And I said to him, "I agree. I agree with this criticism." Now put yourself in the place of the industrialist who has to employ people to handle very sensitive equipment. Would you utilize individuals who had made a certain score on the test and who, from an experience criterion, could go in and handle your equipment and do the work? Or would you take somebody who, with a clinical appraisal, you would say had certain values? This, I would say, is the dilemma an educator is faced with today. This tremendous learning gap, whether it is an evaluation from a secondary school to industrial situations or high schools or colleges, etc. And this, I think, is the real problem.

But I would like to turn the topic just a little bit. I was struck by your statement about the disadvantaged and the advantaged. Those who go to college are given more and more opportunities for the growth of the mind. But this goes exactly counter to a statement that Don Michael has made - that at the present time we are emphasizing the "hard" subjects in colleges so to speak, just at a time when we should be, perhaps, emphasizing the "frills." It seems to me that there is a basic contradiction here. For the kind of society that you have been describing, we need more and more of the people with the hard training -- that is, for their work experience. But if they are not going to be working a large portion of the time, they need to be having the frills for their leisure time. And this to me is a tremendous problem for the counselor. How does he advise? How does he talk with even the college student? On our campus we are having, not a real argument, a little by-play about the importance of tradition. About the importance of the extra-curricula life because the "in" thing today in the college is to ignore this - it is to be an intellectual. Well of course this has tremendous advantages for the society. But these highly trained people that you were talking about, if they have leisure time, need a tremendous amount of experience in things other than the life of the mind.

Michael:

Let me complicate that a little more. I obviously share your concern about it. For one group I spoke of, really topflight, the very highly trained can expect if they pursue those careers to have very little or no leisure time, one of the

problems is: how do you find that group? How do you encourage it? How do you develop an educational system that gives full development to them and at the same time a system which encourages the others to spend a fair amount of their time learning to be people, as well as to do things which go with leisure? Of course this goes back, not only to the college but even to high school and elementary school, and even pre-school. Take it one step farther, as I tried to emphasize here and there in the paper. It isn't enough, in my mind, to have highly skilled technicians in the society, and here is where I think the problem of man and the machine becomes a crucial one. You have got to have wise people as well because the pressure and the trend now is to value most those things which the machine can deal with. And the things that the machines can't deal with, these ineffables, we put in the appendix. Now the problem is: how do you select, how do you guide people, how do you teach for wisdom? I don't even know what wisdom is, but I do know it takes more than training as a technician to cope with the kind of a world we are talking about, precisely because the technologies are as powerful as they are. Who's going to allow himself to be manipulated for what purposes? What are the goals of the society and what kinds of people do you need under these circumstances? What kind of guidance can you provide for that kind of world?

Southworth:

To what end are we building this society? I am concerned about this extra status that you put into this emphasis on the select, the elite. Actually many times they become so isolated that they are not able to relate, even to their families, let alone to their colleagues. And we have some problems here as to the total of society. You mentioned a while ago the problems of the persons who were not being taught to be efficient but rather to be inefficient. Is knowledge the goal of man? Or is man to be primary and is knowledge to be for his use?

Michael:

I would love to hear you people, as guidance people, talk about this, since I suppose this is the fundamental problem you have to face in the dark of the night.

Lovell:

This, of course, is the basic issue in the whole American experience which tends to be much more "doing-oriented" than "thinking-oriented," or "being-oriented."

Siegle:

More thinking than being!

Participant:

A not participator.

Siegle:

Oh, well, that is not a "be-er."

Participant:

That is not a be-er?

Siegle:

NO. This is a very false dichotomy. You see, when you say "a thinker," "a doer" and a "be-er" it may very well be that the only way one person can be is by thinking and doing. To begin to define what thinking and doing mean in that context may be a real direction for us to go at. I thought Don gave us a clue to this when he talked about competency. When he talked about the competent man -- at least I heard it this way because I had been thinking about it myself -- he said that competency is going to have to be re-defined in this world, that we have to become competent to live in different styles. I think that this is the idea here and I think that this raises the question of whether, again, the dichotomy that George Lovell raised is a real one. That is to say, if you are going to train certain people who are going to be the experts, who are going to be so busy they don't have time to play, and then what are you going to do with the others? It has occurred to me that actually the same training or the same kind of competencies would be possible if we shifted from the old received disciplines, the concept of what makes a trained man in this society, to the kind of being man, who has certain competencies that are not defined by the kinds of received disciplines under which we usually classify them.

Lovell:

I am not with you. Go further.

Siegle:

You don't, therefore, train physicists, but you train people - all people - to their fullest capacity, to think hard about whatever they think about.

Lovell:

Okay. So you see, you're back to C. P. Snow. You have got to have some humanities, with which I fully agree. You have got to have some physics, too.

Meyer:

Being and doing rather than thinking. After all, the whole American philosophic tradition is based right here in New England in Royce and Pierce and James. That bunch rejected the whole European idea of the beauty of thought alone. All right, now we find ourselves in a tremendous paradox, really, of trying to figure out if the thinkers, whatever they be in this society, should dominate or it should be, as it has always been, that the doers are the dominators?

Participant:

And what about the 'just be-ers' in this society?

Meyer:

Well, they are still not tolerated.

Michael:

There are going to be more of them.

Meyer:

That's right.

Bryant:

But do we not have to recognize the whole family of man as being of worth? And regardless of the fact that one man may be able to produce, in a certain given area, more than another, does this necessarily mean that he is of more value?

Participant:

Well this depends again on where you place your value system. Again, let's go back in history and say that until, roughly, up to the age of the renaissance man was primarily concerned not with his physical status on earth, but with his eternal reward, and that since that time we have been concerned more with the physical well-being of man. Where is your value system?

Siegle:

A question I was about to ask.

Hopf:

I hear people say "thinkers" and "doers." Earlier there was a question of "what is a be-er?"

Siegle:

No, No! I wouldn't think in terms of physics and humanities. I think there is something else. I don't know how to define this yet, but I think it is not physics or humanities, but it is rigorous thinking, it is rigorous relationship to feeling, and so forth and so on. This kind of thing that may be acquired through the study of physics or even through the study of French literature.

Lovell:

Okay. You mean that accounting can be a liberal subject if taught right?

Siegle:

I wouldn't use the word "liberal subject," I would say that accounting can produce certain senses of competency. That I think, was, in a way, Don Michael's response to his own concerns. He said that it is a new kind of competency that you live with. That you live in different styles. And this competency is something that got learned someplace in here and comes from this relationship to experience, and I would like to tie this back to that computer. That computer can help you test out what bubbles out for me in my rigorous experience.

Participant:

A mundane example of what you are getting at, the competency to live in six different vocations for one person within a life time.

Lovell:

Peter, how are you going to transfer the kind of rigorous knowledge or whatever it is to the voting masses? Answer that question and I will be satisfied. Because all I hear you talk about is rigor and computers and middle-class standards.

Bryant:

But can we separate man's function from his dignity? Can you separate the housewife from society and look down on her because she is not an active addition, she is not a producer in the usual sense?

Participant:

This isn't the point. I think we are losing perspective. I think we forget that the great bulk of the population that we are talking about who vote, and make decisions, whether we like it or not, are not this smooth.

Participant:

This is something that troubles me too, right along. We talk about educating people to be creative, to keep up with the change in culture, etc., but what does happen to this terrific mass of people who are perhaps genetically, biologically, capable of just becoming educated to a certain point and not beyond that? These are the people who, from what Don Michael said, in many cases are the ones who will be displaced by automation and so on, and to the routine kinds of jobs.

When you were talking about, and thinking about, the computers reaching decisions, what that seemed to say to me was that perhaps we are going to give more importance to the kinds of decisions that computers can reach. For instance, think of this proliferation of nonsense research just because it's the kind of problem that you can put on a machine. A lot of things just can't be quantified in the way that a computer needs.

Schletzer:

Do you think that this is going to lead to a kind of dichotomy in our ways of thinking, rather than gradations? In other words, is there some kind of gradation from art and human insight and intuition up to social science and objective problems? Or do you feel that we will end up with the things that we can computerize on the one hand, and the things that we simply can feel about rather than trying to bring any logic to them on the other? Or will we find more gradations and more levels?

Senders:

This is related to a question that I have been thinking a lot about. It seems to me that over the course of the last 100 years or so we have been placing increasing value on cognition. Time was when man's muscles were important and when his manual dexterity was important. Those values, those series of gradations have been replaced because machines have done the things that it was once important to have men do. Now it has become important for men to know and to think and to make wise decisions. But the computer is now taking over this important function, and the thing that we have gotten to value the most is the one that is most likely to be taken over or supplemented. But what are some of the other value systems? Well, we could, indeed, perhaps value people and establish gradations, even training programs if you will, that are non-cognitive in nature. I think, for example, of some of the things that we have hinted at and talked about and around tonight, - these areas of intuition, warmth, humanity, human kindness, and so on. We have never gone out to make these valued qualities with training in them and recognition for reaching certain stated levels in them. I think of the experiments in England of having feeble-minded girls taking care of hospitalized infants. The only disastrous part of this experience was that the girls and "their" babies got too attached to each other. But here is a case where you said, "The person who is most valued is the one who is best at the job of loving." Well, we haven't valued

loving in the same way that we have valued intellect. Are we going to be forced to new sets of values other than the cognitive ones as the cognitive ones become more and more replaceable?

Participant:

Would these be frills?

Senders:

No!

Participant:

Well, I mean by that, is that what Michael had in mind when he spoke of frills?

Senders:

You mean would the crux of the matter of tomorrow be the frill of today?

Hoffman:

These would not be frills, but you have put your finger on the crux of some of the trouble in counselor selection. As we look across the country today we find time and time again a concern for those students, who in their undergraduate work have gotten the very best of grades and on the Miller Analogies and some other tests, have scored exceedingly high. We take a look at them in interviews and we find withdrawn and cold and bookish people. But we are so impressed with the kind of record they made in undergraduate studies that we feel compelled to take them into our program and we push them through a program, the very same kind of program that they have been getting all through undergraduate school, again with top grades, and we give them degrees and push them out into the community to work directly with people that they have never had contact with, at a level they couldn't begin to understand. They immediately shudder and return to the academic world to teach some more in the very same way, or do research with computers. And all of our people in the community are not getting service because there are no feeling, sensitive human beings around to give them service.

O'Hern:

Let's take a look right here. Every bit of research that has come out has said that the high Miller's and the high undergraduate GPA does not predict functioning success. Yet I want to know whether there is anyone here who admits a student to their graduate program who has a low MAT or a low GPA, on the grounds that he has the personal characteristics that right now we think might be needed in a counselor? The thing I get so sick of is that we sit here questioning all this, and then we go back and we do the same thing.

Hoffman:

This is what computers have done to us.

(Violent objections and turmoil.)

Senders:

The crux of the problem is that the people who set the standards, who make the decisions, have gotten where they are because they are bright. Not because they are warm and feeling. If they are warm and feeling they may be in practice, but they are not at the policy-making levels. Our problem is to take policy-makers and help them to look beyond the things that have gotten them where they are at the policy-making jobs.

Meyer:

Yes, but you see that the helping professions have suffered from the same awe of the physical sciences that the rest of the social sciences have suffered from. I think one of the basic problems here is to find a new way of evaluating what we are doing in the social sciences rather than to depend upon the old "proven" methods of the physical sciences. It started off this way in the helping professions; the beginning people in social work, the beginning people in guidance were not particularly scholarly people. They were people who were dedicated to an ideal, who were committed to service -- and this is something. Now I have gone through two trainings: I have gone through social work training and I have gone through guidance training, and it was always played down, you see. We made fun of the "do-gooder," we made fun of the little old lady with the basket, but now I think we are taking a second look at the little old lady with the basket and saying, "She had something. We don't know quite what it was, but maybe she had something."

Michael:

I wonder if the problem is not more formidable than the aping by the human sciences of the physical sciences? I mean that society puts the premium on efficiency and high rates of payoffs, probabalistic payoffs, and this means that the status goes to the guidance people who can turn out people who, in turn, are efficient. And given the nature of our ways of measuring efficiency in this society, it means that they are more likely to turn out the kind of people whom you are describing. You know, unless guidance people in institutions are different from all other people in institutions, the means become the ends after a while, and the organizations that are in business to turn out guidance people, are in business to be organizations, not to meet a new set of social goals primarily. Now this isn't to say that there aren't other trends, nascent in the society.

Pathetically due perhaps for an early death are some efforts in the poverty program to play up the helping professions, and if loads on the highly skilled

professional continue high we may have more sub-professionals coming in. But chasing along in both cases are the opportunities to be more highly efficient by using new technologies, not only the computers, using statistical measures of payoff, etc. This is already the case with the poverty program. I think you are up against a matter of leadership that's larger than just leadership in guidance. It is a matter of the leadership of the whole society, which still values efficiency even though we are probably so fat and happy today that in many cases we don't need it any more.

McGee:

I don't buy that. What is the most powerful agency for social change today on our campus? Generally isn't this just considered to be the legislature? Is this an efficient group?

Michael:

No, I agree. They are very inefficient. But there are two things we have to say and "efficiency" is just too general a term. 1) Legislatures are very effective at maintaining the kind of social context which satisfies their powerful constituents. Their powerful constituents, by and large, are business and industry, and these are agencies concerned with certain measures of accomplishment which have very little to do with the "do-gooder" and enlarging the individual.

The hell with the individual! You close Studebaker a week before Christmas. You know, this kind of thing.

Bryant:

Well this efficiency you are talking about: does this really get to your former statement about the need for wise people? It would appear to me that we need to concern ourselves with 5 or 6 values of man rather than just to concern ourselves with the intellect, or value the practical doer. That rather, we must concern ourselves with men who have the social, aesthetic, religious, and economic and political as well as the theoretical values, and that the integration of this whole person and of the whole society must be brought into focus. We have been putting blinders on ourselves and thinking that only one value is important rather than the whole person and the whole of our society.

Wientege:

I don't think you are being realistic here at all. I agree wholeheartedly with Howell's statement. And I come from Missouri. We are a one-party system. In the State of Missouri if you are not a Democrat you don't count for anything. There is a political give-and-take that goes on all the time. It is a very real thing. I don't believe some of the things Don Michael said are applicable actually, to this situation. This is where I work - in this situation.

McGee:

Well, I was a little doubtful about some of it, but I must make another point. I want to touch on one other thing here that you mentioned. Let me ask you a question. To what extent does the Economic Opportunity Act and some of the other Federal legislation which is passed, or pending with a good chance of passing, follow through on a lot of these ideas you had? And secondly, you mentioned I think in referring to the VISTA program, which you said had this idea of the "aide," why has it failed? The Peace Corps program succeeded. I think in some of these programs are some future directions along the lines that you are alluding to. In other words, to me the Economic Opportunity Act carefully analyzed, I don't know whether it was conceived for this purpose, is a force causing us to change in the direction which you have outlined here.

Michael:

Yes. Let me emphasize what I hope is already clear, that I don't see everything going all in one way. I see us during the next two decades, and so does anyone else who has looked at this, you know, as continuing to be a society of cross-currents. I think one of the major currents, though, is in the direction of a lot more rationalization of activity, while at the same time there is a subcurrent in the direction of more attention to the ineffable. And I think that the gap between them, the conflict between them, will be greater. My own hunch about the Economic Opportunity Act is that, you know, it is in for some very rough sailing, it is more rhetoric than Act in many ways, the consequences of it are going to be unpredictable more than predictable; among other things, it doesn't deal with the largest part of poverty in this country, the twenty million workers who make less than $50 a week. Very calculatedly it doesn't deal with the major part of poverty because that would require substantially increased minimum wages and put a lot more people under minimum wage, and then poverty wouldn't be profitable. It wouldn't be worthwhile for industry to be interested in it. There would be a lot of squawks about it. That isn't meant to be cynical, that's just plain straightforward how the Act is written. The Act, the consequences, are already running into trouble in that the community action programs are becoming bureaucratized in their own way, and refusing to let in programs that are not part of their own activity, alternate approaches to this which should be part of the life blood of such a program. It remains to be seen whether one of the prerequisites for the success of the Act is going to be permitted; namely, teaching the poor, particularly the Negroes, to make demands upon the system. Because when the Negroes do make demands, they are not going to make them the way that middle-class persons do for middle-class reasons. So we are in for some very rough going on that. I think the program, in spite of itself, will be an agent for turmoil and therefore for change. I am not sure at all that it is going to be what we would hope it could be.

Participant:

But I think that as we move ahead into the next 20 years some of the answers, some of the things you gave as possible solutions, are partially pointing to this.

Michael:

Yes, definitely.

Participant:

To me this was the first step. I am glad you asked whether this was done by design or not. But to me there is a lot of first step in this.

Michael:

Oh I agree! There is a first step in the New Education Act too. Incidentally, this is not going well, and for that matter, the Peace Corps is not going terribly well either. I didn't say that everybody was going to be interested in these activities. I said it was still going to be a small group, relatively speaking. I meant that more of the sensitive people that you would be guiding, the bright people that you would be guiding, would choose those kinds of activities than would choose to go into big business or big science, or this sort of thing. I picked it out partly to stress one of the dilemmas that I think people are going to face, whether it's young people or older people who are looking for a second career or a changing career. Some important percent of them -- important because they are sensitive and bright -- who choose not to provide their wisdom and insight in places of government, etc., but choose instead to go into these other socially valuable places. I was trying to play up the serious problem of the gap and the difficult problem of guidance as to whether you guide people of any age into those areas where they emphasize their feelings, their personal, their intuitive responses, or whether to fit them into the Big system with the Big payoff, and the Big money, and the Big ulcers. You know.

O'Hern:

One problem, I guess is, that they have got an awful lot of clods in the operation.

Michael:

Oh, and how!

O'Hern:

And I think as professionals many times we sit down around a table and start saying, "this is what is wrong with the program." We could have tried some really good people and we could have had some tremendous training programs. We will have to try many avenues, but in time we will.

Westervelt:

But what I want to know is why doesn't this group make an impact on Capitol Hill? Because I think that this has become one of those political bombs. But

I think educational institutions on the whole are saying "we don't want to get involved in this," and I think this is because with our middle-class values we don't want to associate with a "flop." Some of us haven't got involved in this operation because we don't have any support from our colleagues outside.

Michael:

Take a look at the article in the latest issue of The Reporter, the history of Marty Deutsch trying to get funds for the OEO. It is very revealing in the light of what you have said, and it fits with what you have said.

Sostek:

One of the things that several people have skirted around, and you, in your presentation have touched on but didn't seem to expand very much, is the whole question of inter-personal relations and experience. It seems to me that where the Peace Corps has worked, this is one of the things that made it work. Where many of the programs in this country have worked, this is one of the things that has made them work. People, whether they be the elite intellectually who work 90 hours a week, or whether they be the people who are poor and not ready for education, it seems to me the things they are missing are the opportunities for experiences of other things. And this may be the area where we, as continuing educators or as guidance personnel, may play a key role, providing experiences for people in inter-personal relations.

Michael:

Yes, I would share that view. I think there is an operational problem of enormous proportions here to turn that into reality on some grand scale. Maybe you can't do it. You know I would...you're going to struggle with it, and I would like to hear some of the struggle tonight as it relates to your question...or your statement. How do you do these things on a big enough scale to make a societal difference? Now it may be that you can't, and it may be that all one can do in this world is to do what you can on whatever scale you can, and believe in what you are doing. I think it is terribly important when one talks about re-educating, or your remarks, Pete, about educating for this new perspective, you know, this new competence, to remember that most of the people, adults now and adults over the next 20 years, are products of an archaic educational system, and an archaic, inadequate set of values for the kind of world we are talking about and the kind of world that's implied in the educational change you talk about. Where do you get the people all along the line to support such a change, and such a viewpoint as we have been talking about here? Again, I don't mean to be depressing about it. I think it is a depressing matter, and maybe the philosophic choice is - well, that you don't, and you do what you can even on a small scale.

Participant:

I wonder if people even realize that? Virginia sat there and she talked about computers and machines taking over the work and really creating much more work. One of the things computers really did was to remove the close individual relations between family members and between members of the community. These things tend to be nonexistent today.

Participant:

What kind of a world are we really talking about though? We live in a world where if we stop spending 40 million dollars a year on national defense, if we didn't live in an economy of scarcity, if you could buy an automobile to last 8 or 10 years -- and it could -- is this a realistic kind of a world? We have a false priming of the pump all the time. But what kind of a world should we have, and who should decide what this world should be?

Michael:

I agree. Every time we head out in the direction I think many of us think we ought to take, we are talking about a radical institutional revision all the way along the line, not just in guidance. This dilemma falls right in your lap because you have to operate between these two.

Participant:

Well, Dr. Michael, as I listen to you and the comments now, I have to say to myself, "this man is working from certain explicit assumptions about the nature of man." Has he made them explicit to himself, and if so, what are they?

Michael:

I tried to, and I will mention one that I think is very important from the standpoint of this discussion. This is that learned, successful behavior is very difficult to change as long as it is successful, and it is especially difficult to change when it has been institutionalized; because in addition to whatever behavior has to deal with a certain goal or a certain purpose, you also pick up a whole set of successful behaviors as a result of the success of the institution for doing these things. What I am saying then is that it is awfully hard, short of disaster, to change large institutions in radical ways, and that for this reason, I don't see, short of disaster, the society going in the ways that we would like it to go, or on the scale that we would like it to go. I can continue to see these complex interplays, many of them not in the direction we like.

Participant:

What kind of theory, though, of the nature of man do you operate on? You must

have some particular biases when you come to face the nature of man. What particular theory do you hold?

Michael:

Why don't you suggest some so that I won't go off in the wrong direction, and then others here can also respond to them.

Participant:

Well, one of the assumptions that was made earlier that bothered me was that the education of man today, is archaic, essentially, for most of the people, and I am curious about this statement. Where can we chop off a dichotomy and state - "from this day backward it's archaic and from this day forward it's all right?" I am a little puzzled too. I am trying to grasp this thing about these verbs and nouns. Now you used "archaic" three times in relation to education.

Michael:

Anachronistic is perhaps a better word. You know, whenever anyone looks at historical processes at all, it always turns out they never started at a particular time, and there were threads of them running forward and backward, and in spite of the way we like to simplify history and say "this happened beginning now," it didn't happen that way, and it didn't happen at one place one time, and I would certainly not want to fall into that trap.

(Approximately ten minutes of discussion were lost here due to technical difficulties.)

END

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